

REMARKS

On page 2 numbered paragraph 4 of the Office Action, the Examiner rejects claims 11 – 16 under 35 U.S.C. 112, first paragraph, as containing subject matter which is not described in the specification in such a way as to enable one skilled in the art to make or use the invention. Specifically, the Examiner states that the specification fails to teach how the first holding device holds the brick while mortar is removed from the rear, the ends, and the top and bottom of the brick. In light of the amendments to the claims presented herewith and the comments hereto, this rejection is respectfully traversed.

Applicant has amended claim 1, so that in pertinent part it now reads “at least one first clamping device for holding a brick wherein said at least one first device is capable of holding said brick in at least two different orientations”. This is done so as to clarify to the Examiner what a “holding device” as claimed by the applicant entails. There is a spring-loaded clamping wheel Object #132 that holds the brick while any mortar attached to the back face of the brick is removed. A spring-loaded wheel pushes against the brick which pushes the brick against the trolley wall. Therefore there really are two clamping devices. The first is therefore # 132, and the second is #170 top and #174 bottom. Support for the new claim language can be found on page 6, paragraph 1, page 8, second complete paragraph, and page 10 paragraphs 1 and 3 of the application as filed.

As is shown in the application on page 8, paragraph 3 through page 9, paragraph 1, the second conveyor delivers the brick to the second station where a clamping wheel acts in concert with the first cutting apparatus to remove mortar from the rear of the brick. The transporter then delivers the brick to the transporter. The transporter then delivers the brick to the carrier, which in turn rotates the brick to the fourth and fifth stations where mortar is removed from the remaining sides of the brick surface. The brick is secured to the carrier by a clamp. Between stations 4 and 5, the brick is rotated 90°. This allows the remaining surfaces of the brick to have mortar removed therefrom without having to reposition the brick within the carrier itself.

As such, the “first device for holding a brick” as previously claimed, and the “at least one first clamping device for holding a brick wherein said at least one first device is capable of holding said brick in at least two different orientations” both refer to all means and apparatuses in the specification that stabilize or secure the brick when mortar is being removed therefrom. The comments and amendments hereto should reflect this, and further draw out to the Examiner what a “holding device” entails in the context of the current invention.

On page 3 numbered paragraph 6 of the office action, the Examiner rejects claims 1 – 12, 15, 17, 19, and 20 under 35 USC 103(a) as being unpatentable over Turner (U.S. Pat. No. 547,746) in view of Barr et al. (U.S. Pat. No. 3,931,501). Specifically, the Examiner states that it would be obvious to one of ordinary skill in the art to provide Turner’s brick recycling apparatus with the imaging device, the computer, an computer

controlled system as taught by Barr in order to facilitate the removing process of the mortar from the bricks. This rejection is respectfully traversed.

The Examiner states that Turner '746 teaches a first device e2, having feeding lugs e3 and positioning lugs e4 for holding the bricks and carrying them toward the cutting rollers. Applicant respectfully disagrees. On page 2, lines 5-25, Turner describes the feeding lugs e3 and the positioning lugs e4 that are attached to the feeding chain e2. Nowhere does Turner '746 describe any of these devices as an apparatus for "holding" a brick. To "hold" an object is to restrain its movement. The e3 feeding lug is described as adapted to "push the [brick] through the rolls" i.e., "pushing" the brick through a pair of rotating cylinders. To "push" an object is to force it to move in a desired direction. The e3 device does not "hold" the brick, in the sense that the movement of the brick is restrained. A device such as e3 in Turner '746 that is described as "pushing" an object cannot also be used to "hold" the same object. The two actions are mutually exclusive.

The e4 apparatus as described in Turner '746 fails to adequately disclose a holding device for the same reason. Turner describes the e4 positioning lugs as carrying the bricks to the cleaning rollers, see page 2, line 15-20. Thus, the e4 positioning lugs, like the e3 feeding lugs, are devices that move the bricks from one spot to another. This movement function of the e3 and e4 devices is completely opposite of the function of the holding device described in the present invention, the purpose of which is to prevent movement of the brick.

The Turner process basis is to mechanically compress the brick and old mortar with grooved or "dimpled" (not smooth) rollers to install point forces with the hope to fracture the bond between the old mortar and brick, Turner page 1 lines 88 to 100. At any given time, the rollers are on both sides of the brick imparting forces onto and into the brick regardless of the presents of any mortar. This imparting of these unwanted forces to the brick can easily cause damage to and break many bricks.

In the current invention, the cutting processes do not apply unnecessary force resulting in many more brick units remaining whole and intact. The forces that are applied by the saws of the current invention are directed only at the mortar, not the entire brick. If there is no mortar, then the saws will not touch the brick.

As stated by the Examiner, Turner does not teach an imaging device for determining the orientation of a brick. The Examiner instead combines Turner '746 with Barr '501 to come up with the currently discussed rejection. It is unclear how the Examiner is combining the two references to get the current rejection. While the '746 patent issued to Turner does indeed deal with the brick recycling subject matter of the present invention, the Examiner is combining this reference with the Barr '501 patent that instead deals with the optimization of cuttings from a piece of wood, and the identification of randomly disposed defects. In the recycle of materials, bricks in the case of the present invention, attached mortar is not a defect, rather a material to be removed

and separated for separate disposal. Defective materials, i.e., bad bricks, are removed by the operator at the sorting table #32 and not deposited on a trolley.

Applicant does not find in his reading of either the '501 patent or the '746 patent any disclosed motivation to combine the imaging device as taught by Barr with the brick cleaning machine as taught by Turner.

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also *In re Lee*, 277 F.3d 1338, 1342-44, 61 USPQ2d 1430, 1433-34 (Fed. Cir. 2002) (discussing the importance of relying on objective evidence and making specific factual findings with respect to the motivation to combine references); *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). A statement

that modifications of the prior art to meet the claimed invention would have been “ ‘well within the ordinary skill of the art at the time the claimed invention was made’ ” because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references. *Ex parte Levensgood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993). See also *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1318 (Fed. Cir. 2000)

The Examiner provides no such combination of references together with the proper motivation to combine in the current Office Action. As the rejection now stands, the *Graham v. John Deere* standards for obviousness have not been met. The Applicant in the current invention has recognized the difficulty with which bricks are recycled in utilizing the techniques and apparatuses of the prior art, and has invented a nonobvious solution for this. None of the prior art cited by the Examiner discloses or even fairly anticipates the limitations that the Applicant discloses in the current invention. In order for an obviousness rejection to be proper, there must be some objective motivation to combine the teachings of the references, and according to *In re Mills*, that motivation must be found in the prior art itself. The Examiner has not provided this requisite disclosure with the art cited in the current rejection.

Finally, the scanning logic is substantially different as presented in Barr's patent. For example, current technology is such that the camera is a "movie" camera, and it is always sending an active picture to the computer. The computer control system must

know when to freeze a frame, just like a frame in an old movie film. The purpose of the computer is to identify the borders of the brick. The quantity of attached mortar as well as all the discussions concerning optimum yield cutting patterns are not relevant.

On page 6, numbered paragraph 7 of the Office Action, the Examiner rejects claim 16 as being unpatentable over Turner (U.S. Pat. No. 547,746) in view of Nishitani et al. (U.S. Pat. No. 5,957,563). Specifically, the Examiner states that it would have been obvious to a person of ordinary skill in the art to provide Turner's brick recycling apparatus with the stacking step as taught by Nishitani in order to facilitate the transport of bricks. In light of the amended claims, and the comments hereto, this rejection is respectfully traversed.

The Applicant believes that this rejection is no longer applicable, due to the distinguishing remarks about Turner '746 that were provided in response to the Examiner's rejection as noted supra. However, the Applicant believes that a few comments to the Nishitani '653 reference should also be presented here to highlight the differences between the stack transferring apparatus of the Nishitani 653 reference, and the stacking apparatus of the current invention.

Nishitani '653 discloses a method of transferring interlock-stacking stacks from a single pallet to two new pallets, so that the resulting stacks are bar stacked. This is disclosed in the Nishitani '653 Abstract and also in column 1, lines 62 through column 2

lines 8. Nishitani '653 accomplishes this by transferring alternating layers from an interlock-stacked pallet to two separate bar-stacked pallets. As disclosed, the first layer of the interlock-stacked pallet has a layer of boxes disposed in a first configuration. The second layer of the interlocked-stacked pallet has a layer of boxer disposed in a second configuration. The third layer has a configuration matching that of the first layer, the fourth layer configuration matches that of the second layer, and so on, in an with consecutive layers each configured in alternating configurations.

Nishitani '653 then will take the first layer (having the first configuration) and move it to a first transferring pallet. The second layer (having the second configuration) is then moved to the second pallet. The third layer, having the same configuration as that of the first layer, is moved to the first transferring pallet, so that the third layer of the original pallet now sits on the first layer of the original pallet. Note that the first and third layer have the same configuration of boxes, thus resulting in a bar-stacked arrangement when they are placed atop each other on the first transferring pallet. The same is true of the second transferring pallet, where the second and fourth layers are transferred thereto.

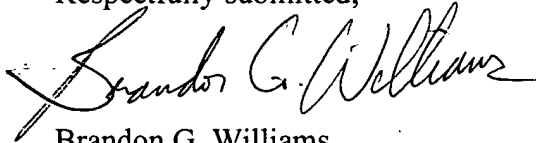
Claim 16 of the present invention, in contrast to Nishitani '653, relates to the stacking of previously unstacked bricks. Claim 16 has been amended to further draw out this distinction. On page 15 of the application as filed, Applicant explains how the stacking mechanism works in the current invention. Referring to paragraphs 1 and 2 on page 15 of the application as filed, hydraulic loading arms move single, unstacked bricks

from the rotating clamp to a predetermined position on a table. As additional bricks are loaded onto the table, the previously loaded bricks are slid down the table to the opposite end, to be replaced by the next brick in succession. Thus, unstacked single bricks are formed into a stack of bricks. This is unlike the Nishitani '653 method of transferring previously stacked bricks from one pallet to another, and employing the stack transferring method as Disclosed by Nishitani '643 would be useless in the present invention, where the bricks are unstacked prior to the stacking step.

On page 6, numbered paragraph 8 of the Office Action, the Examiner rejects claim 18 under 35 U.S.C. 103(a) as being unpatentable over Turner (U.S. Pat. No. 547,746) in view of Terbrugge et al. (5,018,504). Specifically, the Examiner states that it would have been obvious to a person of ordinary skill in the art to provide Turner's brick recycling apparatus with the trailer as taught by Terbrugge in order to drive the brick recycling apparatus to a construction site where recovery of the bricks takes place. In light of the amendments to the claims, and the arguments presented supra as to the applicability of the Turner '746 reference, it is believe that this rejection is no longer valid. Claim 18 should be allowed as a proper dependent claim stemming from an otherwise allowable independent claim.

In view of the currently amended claims and in light of the comments thereto, it is submitted that the present application is now in condition for examination and such is earnestly solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Brandon G. Williams". The signature is fluid and cursive, with a large initial 'B' and 'W'.

Brandon G. Williams

Attorney for Applicant

Registration No. 48,844

DOUGHERTY, CLEMENTS & HOFER

The Roxborough Building

1901 Roxborough Road; Suite 300

Charlotte, North Carolina 28211

Telephone: (704) 366-6642

Attorney's
Docket 3195